#### In the United States Patent and Trademark Office

Appellants: Rebecca W. Griffin et al. Docket No.: 18872 Serial No.: 10/697,465 Group: 1771

Confirmation No: 7960 Examiner: Davis, Jenna L. Filed: Date: July 2, 2007

For: Cross Machine Direction Extensible Nonwoven Webs

## Amended Brief on Appeal to the Board of Patent Appeals and Interferences

Mail Stop Appeal Brief - Patents Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. 41.37 Appellants respectfully submit this Appeal Brief in support of their Appeal of the **Final Rejection** of claims 11-22 by Examiner Davis, which was mailed on November 30, 2006.

Appellants timely transmitted their Notice of Appeal pursuant to 37 C.F.R. 41.31, which was mailed on March 30, 2007 and which was received in the Office on April 2, 2007. Thus, the usual time for filing this Brief ends June 2, 2007. Accordingly, a Petition for a one month extension of the time is submitted herewith, bringing the time to file this Brief to Monday, July 2, 2007. Therefore, it is believed that this Brief is timely filed along with the petition for a one month extension of the time. However, should any other fees be determined to be required, please charge any additional fees to deposit account number 11-0875.

### **Real Party in Interest**

The present Application has been assigned to Kimberly-Clark Worldwide, Inc.

## **Related Appeals and Interferences**

There are no other appeals or interferences known to Appellants, their legal representatives or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision on this appeal.

#### **Status of the Claims**

Claims 1-22 remain in the application with claims 11-22 being finally rejected and subject of this appeal. Claims 1-10 were previously withdrawn as claims directed to non-elected subject matter.

#### **Status of Amendments**

No After-Final amendments have been filed; however, an After-Final paper containing a request for reconsideration was filed by Appellants on February 28, 2007. The Examiner initialed that After-Final paper for entry into the record.

## **Summary of Claimed Subject Matter**

The invention as presently claimed in independent claim 11 is drawn to a cross machine direction extensible nonwoven web (please see, e.g., as described in the application specification on page 6, lines 4-11 and/or FIG. 2, item 80 or FIG.2, item 100) consisting essentially of continuous thermoplastic fibers (please see, e.g., as described in the application specification on page 5, lines 5-9) and a plurality of thermal bond points in a pattern (please see, e.g., as described in the application specification on page 10, line 34 to page 11, line 6 and/or FIG. 2 item 110). The continuous thermoplastic fibers have an average diameter greater than about 10 microns, the nonwoven web has a substantially uniform basis weight (please see, e.g., as described in the application specification on page 16, lines 6-11, and page 2, lines 21-26), and the force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 60 percent of the cross machine direction peak tensile force of the bonded nonwoven web (please see, e.g., the application specification at Table 1 (page 16) and specification text at page 16 lines 16-24 and page 17 lines 7-20).

The invention as presently claimed in independent claim 17 is drawn to a cross machine direction extensible nonwoven web (please see, e.g., as described in the application specification on page 6, lines 4-11 and/or FIG. 2, item 80 or FIG.2, item 100) consisting essentially of continuous thermoplastic fibers (please see, e.g., as described in the application

specification on page 5, lines 5-9) and a plurality of thermal bond points in a pattern (please see, e.g., as described in the application specification on page 10, line 34 to page 11, line 6 and/or FIG. 2 item 110). The continuous thermoplastic fibers have an average diameter greater than about 10 microns, the nonwoven web has a substantially uniform basis weight (please see, e.g., as described in the application specification on page 16, lines 6-11, and page 2, lines 21-26), and the force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 30 percent of the force required to extend the web to 30 percent in the machine direction (please see, e.g., the application specification at Table 2 (page 17); application specification text at page 16 lines 16-24 and page 17 lines 3-6 and 20-23; and FIG. 6).

### **Grounds of Rejection to be Reviewed on Appeal**

Ground 1. Claims 11-22 (including independent claims 11 and 17) stand finally rejected under 35 U.S.C. §102(b) as allegedly being inherently anticipated by (or, alternatively, under §103(a) as obvious in view of) and thus unpatentable over U.S. Pat. No. 5,804,021 to Abuto et al. (hereinafter "Abuto et al."). The claims are argued as a group.

## **Argument**

#### Ground 1. Anticipation (obviousness) rejection of claims 11-22 over Abuto et al.

On page 2 of the Office Action mailed November 30, 2006, the claims 11-22 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 5,804,021 to Abuto et al. (hereinafter "Abuto et al.") or alternatively under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over Abuto et al., for the reasons "as set forth in section 5 of the Office action dated April 20, 2006".

The invention as presently claimed in independent claims 11 and 17 is as summarized above. As noted in the Application Specification at page 2, lines 31-34, there is a need for cross machine direction extensible nonwoven web materials which exhibit the cross machine

direction extensibility <u>without</u> the requirement of having had one or more post-processing steps applied to the nonwoven web material. Such post processing steps act to create physical structure in the web material that is capable of enabling the provision of extensibility.

As stated in the Office Action dated April 20, 2006 (and by reference in the Final Office Action dated November 30, 2006), the Abuto et al. reference discloses a fibrous nonwoven laminate material exhibiting elasticity in at least one direction. However, relevant to the instant invention, the nonwoven web facing layer taught by Abuto et al. is an example of a post-processed web wherein the extensibility is increased in particular due to the structure present in the web material as created via a post-processing operation. More particularly, Abuto et al. provide for the extensibility to be increased because the webs contain a plurality of slits through the nonwoven material. In contrast, independent claims 11 and 17 as claimed require that the nonwoven web consist essentially of continuous fibers.

As taught in Abuto et al., the additional web structural elements such as the slits which provide extensibility are provided as a plurality of slits that are in generally parallel rows. The generally parallel rows of slits extend from edge to edge of the material. As such, Appellants submit that the fibrous nonwoven layer disclosed in Abuto et al. would not consist essentially of continuous fibers. Rather, Appellants submit that the provision of the plurality of slits would produce a fibrous nonwoven web having at least a substantial number of discontinuous fibers at the slits, and therefore, the slit apertured webs of Abuto et al. do not disclose and cannot therefore anticipate a web consisting essentially of continuous fibers, as required by the instant claims. Appellants respectfully submit that this is clearly a material difference in the actual structure of the instant material vs. the materials taught by Abuto et al. Contrariwise, and to the Examiner's question of how the claims have been further limited, the inventive material consisting essentially of continuous fibers does not include within the scope such a material having a plurality of slits, because this would mean a fibrous nonwoven web having many discontinuous fibers at the positions of the slits across the nonwoven web material.

Additionally, it was stated in the Office Action mailed November 30, 2006 that the Appellants' prior similar arguments relating to the fact that, as claimed, their inventive web consists essentially of continuous fibers are not persuasive because,

It is not seen how this limits the present claims as the present claims are drawn to an article and not a process. Further it is not seen that the slits provided by Abuto take away from the basic and novel characteristics of the web claimed here. Like the material claimed here the Abuto material has the requisite extensibility of the present claims.

Appellants submit that this reply appears to misapprehend the reasoning underlying Appellants' arguments. Appellants agree that they are not currently claiming a process. Rather, Appellants submit that their claim limitation – the nonwoven web consisting essentially of continuous thermoplastic fibers – is clearly a structural limitation and not a process limitation. Furthermore, it is a structural limitation clearly neither anticipated by, nor obvious over (that is, not even suggested by), the teachings of Abuto et al. Please consider that the fibrous webs of Abuto et al. are made extensible <u>because</u> the fibrous webs have been slit (cut). Therefore, an extensible web consisting essentially of continuous thermoplastic fibers as claimed by Appellants – non-cut fibers – can not be made non-novel by a web teaching that it has extensibility due the provision of slits/cuts through the web (and, necessarily, through the fibers of that web).

Stated another way, to remove the slits in the webs taught by Abuto et al., that is, to attempt to modify them to make them capable of being read upon by the "consisting essentially of continuous thermoplastic fibers" element as claimed by Appellants, would render the webs of Abuto et al. incapable of the extensibility required for their stated and intended purpose. According to M.P.E.P. §2143.01, referring to *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984), a "proposed modification cannot render the prior art unsatisfactory for its intended purpose". Appellants respectfully submit that one skilled in the art would not make such a modification, and if one did, Appellants submit the webs of Abuto et al. would not work as required. Therefore, Appellants respectfully submit that according to M.P.E.P. §2143.01, the rationale supplied by the Office for its rejection of Appellants' claims is untenable.

Furthermore, please note that according to M.P.E.P. §2144.04, referring to *In re Edge*, 359 F.2d 896, 149 USPQ 556 (CCPA 1966), "the omission of an element and retention of its function is an indicia of unobviousness". Here, the Appellants' claims omit the web structure taught by and required by Abuto et al. (slits), yet still retain the extensibility made possible by that structure. Therefore, Appellants respectfully submit that also according to M.P.E.P. §2144.04, the rationale supplied by the Office for its rejection of Appellants' claims is untenable.

Therefore, for the reasons stated above, because the Abuto et al. reference does not teach (or, alternatively, suggest) all of the parameters or elements of Appellants' claims, Appellants respectfully submit that the rejection of claims 11-22 under 35 U.S.C. §102(b) (alternatively under 35 U.S.C. § 103(a)) should be withdrawn and favorable action on the pending claims is respectfully requested.

As a final matter and for completeness, Appellants note that in the prior rejection mailed April 20, 2006 (which was repeated by reference thereto in the Office Action/final rejection mailed November 30, 2006), several of the claims elements summarized above with respect to claims 11 and 17 (elements relating to forces required to extend the web in cross-machine direction and the machine direction), not taught by Abuto et al., were alleged by the Office to be inherently disclosed by the Abuto et al. reference. Although Appellants do not necessarily agree with these assertions of inherency, Appellants have not at this time attempted to reproduce webs as are described in Abuto et al. in order to procure testing against the claims limitations involved, particularly in view of their arguments above demonstrating novelty and non-obviousness of their claims over the teachings of Abuto et al. for these other reasons stated.

#### Conclusion

For the reasons stated above it is Appellants' position that the rejections of their claims have been shown to be untenable and should be **reversed** by the Board. That is, for the reasons set forth above, it is respectfully submitted that the rejection under 35 U.S.C. §102 (and alternatively stated under 35 U.S.C. §103) should be reversed. It is respectfully submitted that Appellant's claimed invention is neither expressly taught by nor inherent in the cited reference, nor, alternatively, obvious from the cited reference.

Please charge the \$500.00 fee (fee code 1402), pursuant to 37 C.F.R. 41.20(b)(2), for filing this Appeal Brief to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. Any additional prosecutional fees which are due may also be charged to deposit account number 11-0875.

The undersigned may be reached at: 770-587-8908.

Respectfully submitted,

REBECCA W. GRIFFIN ET AL.

By: /Robert A. Ambrose/

Robert A. Ambrose

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#### CERTIFICATE OF TRANSMISSION

I, Robert A. Ambrose, hereby certify that on July 2, 2007, this Appeal Brief is being transmitted to the United States Patent and Trademark Office, EFS-Web system.

| Ву: | /Robert A. Ambrose/ |
|-----|---------------------|
|     | Robert A. Ambrose   |

## **Claims Appendix**

The claims on appeal are:

- 1. (withdrawn) A method of making an as-formed cross direction extensible nonwoven web comprising:
  - a) extruding continuous thermoplastic fibers having an average diameter greater than about
    10 microns;
  - b) quenching the fibers;
  - c) melt-attenuating the fibers;
  - d) collecting the continuous thermoplastic fibers on a moving foraminous forming surface to form an unbonded nonwoven web; and
- e) pattern bonding the nonwoven web by the application of heat and pressure; wherein the bonded nonwoven web has substantially uniform basis weight, and further wherein the tensile force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 60 percent of the cross machine direction peak tensile force of the bonded nonwoven web.
- 2. (withdrawn) The method of Claim 1 wherein the tensile force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 50 percent of the cross machine direction peak tensile force of the bonded nonwoven web.
- 3. (withdrawn) The method of Claim 2 wherein the tensile force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 40 percent of the cross machine direction peak tensile force of the bonded nonwoven web.
- 4. (withdrawn) The method of Claim 1 wherein the bonded nonwoven web has a MD:CD tensile strength ratio of at least about 3:1.
- 5. (withdrawn) The method of Claim 1 wherein the continuous thermoplastic fibers are extruded in a crimpable cross sectional configuration and further including the step of applying heat to the fibers to activate crimp.

- 6. (withdrawn) The method of Claim 5 wherein the step of applying heat to the fibers is performed prior to the step of collecting the fibers on the foraminous forming surface.
- 7. (withdrawn) The method of Claim 5 wherein the step of applying heat to the fibers is performed after the step of collecting the fibers on the foraminous forming surface.
- 8. (withdrawn) The method of Claim 5 wherein the crimpable cross sectional configuration is side-by-side or eccentric sheath-core configuration.
- 9. (withdrawn) The method of Claim 1 further including the step of laminating the nonwoven web to at least one additional layer.
- 10. (withdrawn) The method of Claim 9 wherein the at least one additional layer is selected from the group consisting of breathable films, elastic films, foams, and nonwoven webs.
- 11. (previously presented) A cross machine direction extensible nonwoven web consisting essentially of continuous thermoplastic fibers and a plurality of thermal bond points in a pattern, the continuous thermoplastic fibers having an average diameter greater than about 10 microns, the nonwoven web having substantially uniform basis weight, and wherein the force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 60 percent of the cross machine direction peak tensile force of the bonded nonwoven web.
- 12. (original) The nonwoven web of Claim 11 wherein the force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 50 percent of the cross machine direction peak tensile force of the bonded nonwoven web.
- 13. (original) The nonwoven web of Claim 11 wherein the force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 40 percent of the cross machine direction peak tensile force of the bonded nonwoven web.

- 14. (original) The nonwoven web of Claim 13 wherein the continuous thermoplastic fibers are crimped multicomponent fibers.
- 15. (original) A laminate material comprising the nonwoven web of Claim 11 and at least one additional layer.
- 16. (original) The laminate material of Claim 15 wherein the at least one additional layer is selected from the group consisting of breathable films, elastic films, foams, and nonwoven webs.
- 17. (previously presented) A cross machine direction extensible nonwoven web consisting essentially of continuous thermoplastic fibers and a plurality of thermal bond points in a pattern, the continuous thermoplastic fibers having an average diameter greater than about 10 microns, the nonwoven web having substantially uniform basis weight, and wherein the force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 30 percent of the force required to extend the web to 30 percent in the machine direction.
- 18. (original) The nonwoven web of Claim 17 wherein the force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 25 percent of the force required to extend the web to 30 percent in the machine direction.
- 19. (original) The nonwoven web of Claim 18 wherein the force required to extend the bonded nonwoven web 30 percent in the cross machine direction is less than about 20 percent of the force required to extend the web to 30 percent in the machine direction.
- 20. (original) The nonwoven web of Claim 17 wherein the continuous thermoplastic fibers are crimped multicomponent fibers.
- 21. (original) A laminate material comprising the nonwoven web of Claim 17 and at least one additional layer.

22. (original) The laminate material of Claim 21 wherein the at least one additional layer is selected from the group consisting of breathable films, elastic films, foams, and nonwoven webs.

# **Evidence Appendix**

None.

# **Related Proceedings Appendix**

None.